

I. Amendment(s) to the Claim(s):

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) An image display apparatus, comprising:

input/output means for transferring image data input from a first image display device having a display unit, wherein the first image display device is disposed at an upstream location to a second image display device;

acquisition means for acquiring resolution information of the second image display device having a second display unit;

generation means for generating resolution information on the basis of the resolution information acquired by the acquisition means and a resolution of the display unit; and

first storage means for storing the generated resolution information;

direction detection means for determining a direction, wherein the direction is determined by assigning a value based upon detecting whether at least one image display device connected at a downstream location from the first image display device is arranged in a vertical or horizontal direction and, wherein the generation means generates the resolution information by cumulatively adding the resolution of the display unit with the resolution information acquired by the acquisition means in the direction determined by the direction detection means;

detection means for detecting a location of a present image display device in a multidisplay device system;

determination means for determining which part of the image data should be displayed by a present display unit of the present image display device on the basis of the location detected by the detection means; and

display control means for displaying the part of the image data.

2. (previously presented) An image display apparatus according to claim 1, further comprising:

communication processing means for performing DDC (Display Data Channel) communication with an external device; and

a memory for storing EDID (Extended Display Identification Data) information transformed in the DDC communication, wherein the acquisition means acquires resolution information using the communication processing means and where

the first storage means stores the resolution information generated by the generation means by rewriting a corresponding item of the EDID information in the memory.

3. (cancelled)

4. (cancelled)

5. (currently amended) An image display apparatus according to claim 4₁, wherein the display control means determines the display scaling factor on the basis of the number of pixels of the part of the image data to be displayed and on the basis of the resolution of the present display unit, converts the resolution of the part of the image data in accordance with the determined display scaling factor, and displays the part of the image data on the present display unit.

6. (currently amended) An image display apparatus according to claim 4₁, wherein the detection means comprises:

second storage means for acquiring chain connection information indicating the manner in which further image display devices are chain-connected at downstream locations of the present image display device, generating chain connection information associated with the present image display device on the basis of the acquired chain connection information, storing the generated chain connection information such that an upstream image display device at an upstream location from the present image display device can acquire the chain connection information; and

third storage means for acquiring a first value, wherein the first value is the total number of image display devices connected at downstream locations from the present image display device and storing the first value such that the upstream image display device can acquire the first value, wherein the detection means determines the location of the present image display device in the multidisplay device system on the basis of the chain connection information and the first value.

7. (previously presented) An image display apparatus according to claim 6, further comprising:

direction detection means for detecting whether the image display devices connected at downstream locations from the present image display device are arranged in the vertical or horizontal direction, wherein the chain connection information includes a second value, wherein the second value is information indicating the total number of image display devices chain-connected in the vertical direction and a third value, wherein the third value is information indicating the total number of image display devices chain-connected in the horizontal direction.

8. (previously presented) A multidisplay system including a plurality of image display apparatus according to claim 1, wherein the plurality of image display apparatus are connected

to each other and where a host computer is connected to an image display apparatus at a most upstream location of the connected plurality of image display apparatus.

9. (currently amended) An image display method using an image display apparatus, the image display method comprising the steps of:

inputting image data from a first image display device and outputting the image data to a second image display device disposed at a downstream location from the first image display device;

acquiring resolution information from the second image display device having a second display unit;

generating resolution information on the basis of the resolution information from the second image display device and resolution of a display unit of the first image device; and

storing the generated resolution information;

direction detection, wherein the step of direction detection determines a direction that is assigned a value based on whether image display devices connected at downstream locations from the first image device are arranged in the vertical or horizontal direction, wherein in the generating step, the generated resolution information is obtained by cumulatively adding the resolution of the display unit with the resolution information acquired in the acquiring step in the direction determined in the direction detection step;

detecting the location of a present image display device, having a present display unit, in a multidisplay system, wherein the multidisplay system includes a plurality of image display devices;

determining which part of the image data should be displayed by the present display unit on the basis of the location detected in the detecting the location step; and

displaying the part of the image data on the present display unit.

10. (previously presented) An image display method according to claim 9, further comprising the step of:

performing DDC communication with an external device, and storing EDID information obtained via the DDC communication.

11. (cancelled)

12. (cancelled)

13. (currently amended) An image display method according to claim ~~42~~9, wherein the displaying step includes the steps of:

determining the display scaling factor on the basis of the number of pixels of the part of the image data to be displayed and on the basis of the resolution of the present display unit, converting the resolution of the part of the image data in accordance with the determined display scaling factor, and displaying the part of the image data on the present display unit.

14. (currently amended) An image display method according to claim ~~42~~9, wherein the detecting the location step includes the steps of:

acquiring chain connection information indicating the manner in which further image display devices are chain-connected at downstream locations from the present image display device;

generating chain connection information associated with the present image display device on the basis of the acquired chain connection information, and storing the generated chain connection information such that an image display device at an upstream location from the present image display device can acquire the chain connection information;

acquiring a first value, wherein the first value is the total number of image display devices connected at downstream locations from the present image display device and storing the total number of image display devices such that the image display device at the upstream location from the present image display device can acquire the first value; and

detecting the location of the present image display device in the multidisplay system on the basis of the chain connection information and the first value.

15. (previously presented) An image display method according to claim 14, further comprising the step of:

determining whether image display devices connected at downstream locations from the present image device are arranged in the vertical or horizontal direction, wherein the chain connection information includes information indicating a second value, wherein the second value is the total number of image display devices chain-connected in the vertical direction, and a third value, wherein the third value is information indicating the total number of image display devices chain-connected in the horizontal direction.

16. (currently amended) A display control apparatus for controlling an image display apparatus, comprising:

input/output means for transferring image data input from a first image display device disposed at an upstream location to a second image display device;

acquisition means for acquiring resolution information of the second image display device having a second display unit;

generation means for generating resolution information on the basis of the resolution information acquired by the acquisition means and the resolution of a display unit of the first image display device; and

first storage means for storing the generated resolution information;

direction detection means for determining a direction, wherein the direction is determined by assigning a value based upon detecting whether at least one image display device connected at a downstream location from the first image display device is arranged in a vertical or horizontal direction and, wherein the generation means generates the resolution information by cumulatively adding the resolution of the display unit with the resolution information acquired by the acquisition means in the direction determined by the direction detection means;

detection means for detecting a location of a present image display device in a multidisplay device system;

determination means for determining which part of the image data should be displayed by a present display unit of the present image display device on the basis of the location detected by the detection means; and

display control means for displaying the part of the image data.

17. (previously presented) A display control apparatus according to claim 16, further comprising:

communication processing means for performing DDC communication with an external device; and

a memory for storing EDID information transformed in the DDC communication, wherein the acquisition means acquires resolution information using the communication processing means and where the first storage means stores the resolution information generated by the generation means by rewriting a corresponding item of the EDID information in the memory.

18. (previously presented) An image display method according to claim 10

where in the acquisition step, the resolution information is acquired using a communication processor and

where in the storage step, the storing of the resolution information generated in the generation step, is accomplished by rewriting a corresponding item of the EDID information in the memory.